

LISTING OF THE CLAIMS

1. (Previously Presented) A directional distributed coupler comprising:
a first conductive line carrying a main signal between two end terminals;
a second conductive line coupled to the first conductive line, the second line comprising a first terminal and a second terminal between which flows a sampled signal, proportional to the main signal, the second conductive line being coupled to the first conductive line such that the first terminal provides a first signal that is a function of a magnitude of the main signal flowing in a first direction on the first conductive line, and the second terminal provides a second signal that is a function of a magnitude of the main signal flowing in a second direction on the first conductive line; and
a first capacitor coupled to the two end terminals of the first conductive line and a second capacitor coupled to the two terminals of the second conductive line.
2. (Previously Presented) The coupler of claim 1, wherein the lines have a same length.
3. (Previously Presented) The coupler of claim 1, wherein the capacitors have same values.
4. (Previously Presented) The coupler of claim 1, wherein the lines are sized in $\lambda/4$ for a central band frequency greater than the frequency band for which the coupler is intended.
5. (Previously Presented) The coupler of claim 1, wherein each conductive line comprises at least two parallel sections between its end terminals, the sections of the two lines being interleaved.
6. (Previously Presented) The coupler of claim 5, wherein at least one capacitor electrode is formed in a same metallization level as the first conductive line.

7. (Previously Presented) The coupler of claim 1, wherein the first capacitor has a value ranging between 0.1 and 10 pF, the central frequency of the coupler ranging between a few tens of MHz and a few tens of GHz.

8. (Previously Presented) A distributed coupler, comprising:
a first conductive line that carries a signal between a first terminal and a second terminal;
a first capacitor connected to the first terminal and the second terminal; and
a second conductive line comprising a third terminal and a fourth terminal, the second conductive line being coupled to the first conductive line such that the third terminal provides a first coupled signal that is a function of a magnitude of the signal flowing in a first direction on the first conductive line, and a fourth terminal provides a second coupled signal that is a function of a magnitude of the signal flowing in a second direction on the first conductive line.

9. (Previously Presented) The distributed coupler of claim 8, further comprising a second capacitor connected to the third terminal and the fourth terminal.

10. (Previously Presented) The distributed coupler of claim 8, wherein the second conductive line is connected to a control circuit, the control circuit being connected to an amplifier that supplies the signal to the first terminal.

11. (Previously Presented) The distributed coupler of claim 8, wherein at least one capacitor electrode is formed in a same metallization level in which is formed the first conductive line.

12. (Previously Presented) The distributed coupler of claim 9, wherein the first capacitor and the second capacitor have values between 0.1 and 10 pF.

13. (Previously Presented) The distributed coupler of claim 8, wherein the directional distributed coupler has a directivity of at least 28 dB.

14. (Previously Presented) The distributed coupler of claim 8, wherein a central frequency of the directional distributed coupler is between a few tens of MHz and a few tens of GHz.

15. (Previously Presented) The distributed coupler of claim 8, wherein the second terminal is coupled to an antenna.

16. (Previously Presented) A distributed coupler, comprising:
a first conductive line that carries a signal between a first terminal and a second terminal;
a first capacitor connected to the first terminal and the second terminal; and
a second conductive line coupled to the first conductive line;
wherein the first conductive line is sized in $\lambda/4$ for a central band frequency greater than a frequency band for which the distributed coupler is intended.

17. (Previously Presented) The distributed coupler of claim 16, wherein the second conductive line has a third terminal and a fourth terminal, and further comprising:
a second capacitor connected to the third terminal and the fourth terminal.

18. (Previously Presented) The distributed coupler of claim 16, further comprising:
a control circuit connected to an amplifier that supplies the signal to the first terminal.

19. (Previously Presented) The distributed coupler of claim 18, wherein the control circuit is configured to turn off the amplifier when a voltage of the second conductive line exceeds a threshold.

20. (Previously Presented) The distributed coupler of claim 8, wherein the first conductive line is sized in $\lambda/4$ for a central band frequency greater than a frequency band for which the distributed coupler is intended.